

REMARKS

Claims 1-21 are pending in the application. Claims 11-21 have been withdrawn from consideration. Claims 1 and 8 have been amended for clarity and to correct grammatical errors. Accordingly, no new matter is introduced by these amendments.

Reply to the Rejection of Claims 1-10 under 35 U.S.C. § 102(b)

The Examiner has rejected Claims 1-10 as being anticipated by International Publication No. WO 00/06684 to Wäschenbach *et al.* ("Wäschenbach"). Specifically, the Examiner states -

Applicants claim (*sic.* claim) a solid polymer film comprising a polymer comprising a) 2 to 60 mole percent of protonated amine monomer units, wherein said protonation is formed by a fixed acid; and b) 40 to 98 percent of hydrophobic monomer units.

Waschenbach discloses a composition for use in a dishwasher which is provided in the form of a tablet. The composition is characterized by a base composition which essentially carries (*sic.* carries) out its function during the rinse cycle of the dishwasher. The particle also has a coating which, for the most part, completely surrounds the core(s). Said coating comprises at least one compound whose solubility increases with a declining concentration of a specific ion in the surrounding medium. The at least one particle is arranged in or on the tablet in such a way that the surface of the particle(s) is, at most, partially in direct contact with the surface of the base composition surrounding this/these particles. In order to prevent the coating from substantially dissolving or to prevent the coating from substantially detaching from the core(s), the concentration of the specific ion in the local surrounding of the particle(s) is sufficiently high until the tablet has, for the most part, completely dissolved. See abstract. Preferably the solubility of the compound increases with decreasing OH⁻ ionic concentration and therefore decreasing pH-value in the surrounding medium. Preferably, the compound comprises a polymer, particularly preferred manner (*sic.*) a pH sensitive polymer, which comprises at least one repeat unit, which has one basic function, which is not part of the polymer backbone. In a preferred embodiment the polymer comprises at least one (*sic.* one) repeat unit, which is based on a compound selected from the group comprising vinyl alcohol derivatives, acrylates or alkyl acrylates having said basic function. According to a special embodiment of the invention the polymer is a carbohydrate functionalized with said base function. The basic function is preferably an amine, in particularly preferred manner a secondary or tertiary amine. According to an alternative, the repeat unit is based on a compound - Formula III, and preferably the repeat unit is based on compound - Formula IV. See pages 8-10. Therefore, these claims are anticipated.

For the following reasons, Applicants respectfully traverse the Examiner's rejection of claims 1-10 as being anticipated by Wäschenbach.

Wäschenbach discloses a composition provided in the form of a tablet 1 for use in a dishwasher. The composition includes a base composition 2, 3, 2', 2" (half tablets; *see* p. 14, last paragraph) that carries out its function during the main cleaning cycle of the dishwasher. The composition also includes at least one particle 6, 6', 6". This particle 6, 6', 6" has at least one core 8, 8". The core 8, 8" includes at least one substance that carries out its function during the rinse cycle of the dishwasher. The particle 6, 6', 6" also has a coating 9, 9" that, at least mostly, surrounds the core(s) 8, 8". The coating 9, 9" includes at least one compound whose solubility increases with a declining concentration of a specific ion in the surrounding medium. The at least one particle 6, 6', 6" is arranged in or on the tablet 1 in such a way that the surface of the particle(s) 6, 6', 6" is, at most, partially in direct contact with the surface of the base composition 2, 3, 2', 2" surrounding this/these particles 6, 6', 6". In order to prevent the coating 9, 9" from substantially dissolving or from substantially detaching from the core(s) 8, 8", the concentration of the specific ion in the local surrounding of the particle(s) 6, 6', 6" is sufficiently high until the tablet 1 has, for the most part, completely dissolved. The invention also relates to a method for conducting a dishwashing cycle in a dishwasher while using the inventive composition. (Abstract; p. 13, 4th ¶ - p. 17, 2nd ¶; Figures 2-6.)

As noted above, the coating 9, 9" includes at least one compound that is insoluble or only slightly soluble at the concentration of the specific ions at the end of the main cleaning cycle of the dishwasher, preferably at a pH above 10. This compound further shows sufficient solubility at the concentration of the specific ion during the clear rinse cycle so that it dissolves or is detached from the core(s) 8, 8" allowing an at least partial release of the core material into the medium of the clear rinse cycle, preferably at a pH below 9 (p. 8, 5th, 6th and 7th ¶¶).

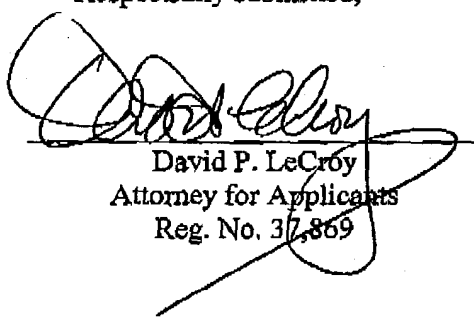
The compound can contain a pH-sensitive polymer having at least one repeating unit. This repeating unit has at least one basic functional group that is not part of the backbone chain of the polymer (p. 9, 2nd ¶). The repeating unit is preferably based on a compound selected from the group comprising vinyl alcohol derivatives, acrylates or alky acrylates (p. 9, 3rd ¶). The polymer can be a carbohydrate. The basic functional group can preferably be an amine, particularly a secondary or tertiary amine (p. 9, 4th and 5th ¶¶).

Still, Wäschenbach does not teach or suggest protonation of the amine functional group. Formulas III and IV provided on pp. 9 and 10 of Wäschenbach do not illustrate protonation of the compound. "A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference." *Verdegaal Bros. v. Union Oil Co. of California*, 814 F.2d 628, 631, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987). "When a claim covers several structures or compositions, either generically or as alternatives, the claim is deemed anticipated if any of the structures or compositions within the scope of the claim is known in the prior art." *Brown v. 3M*, 265 F.3d 1349, 1351, 60 USPQ2d 1375, 1376 (Fed. Cir. 2001) (claim to a system for setting a computer clock to an offset time to address the Year 2000 (Y2K) problem, applicable to records with year date data in "at least one of two-digit, three-digit, or four-digit" representations, was held anticipated by a system that offsets year dates in only two-digit formats). As Wäschenbach does not teach or suggest protonated amine monomer units, Wäschenbach can not be said to anticipate the presently claimed invention.

For at least these reasons, claims 1-10 are not anticipated by Wäschenbach. Withdrawal, therefore, of the rejection of claims 1-10 under 35 U.S.C. § 102(b) is respectfully requested. Allowance of the claims is believed to be in order, and such allowance is respectfully requested.

Respectfully submitted,

Dated: 8 April 2004
NATIONAL STARCH AND CHEMICAL
COMPANY
Post Office Box 6500
Bridgewater, New Jersey 08807-0500
Phone 908.683.5433
Fax 908.707.3706


David P. LeCroy
Attorney for Applicants
Reg. No. 37,869